



4-4-05

1541651

Express Mail No. ED 628 943 828 US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Hariri et al.

Confirmation No.: 2178

Application No.: 10/511,355

Art Unit: 1651

Filed: October 12, 2004

Examiner: To be assigned

For: MODULATION OF STEM AND
PROGENITOR CELL DIFFERENTIATION,
ASSAYS, AND USES THEREOFAttorney Docket No: 9516-149-999
(CAM: 501872-999148)TRANSMITTAL OF REVOCATION AND POWER OF ATTORNEYCommissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

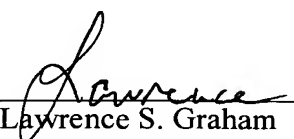
Sir:

In accordance with the Rules of Practice, please consider the following remarks. Applicants respectfully request entry of the enclosed Revocations and Powers of Attorney executed by Robert J. Hariri on behalf of Anthrogenesis Corporation, by Sol J. Barer on behalf of Celgene Corporation, and Alan J. Lewis on behalf of Signal Pharmaceuticals LLC, each with respect to the above-referenced patent application. Assignments by the inventors supporting the Revocations and Powers of Attorney are attached to each, respectively. Assignments by the inventors supporting each respective Revocation and Power of Attorney are also enclosed.

Applicants do not believe there is a fee due in connection with this submission. However, should the Patent and Trademark Office determine otherwise, please charge the required fee to Jones Day Deposit Account No. 503013.

Respectfully submitted,

Date: April 1, 2005

by 
for Lawrence S. Graham
Anthony M. InsognaReg. No. 49,020
Reg. No. 35,203**JONES DAY**
222 East 41st Street
New York, New York 10017-6702
(212) 326-3939



Express Mail No.: **ED 628 943 828 US**
POWER OF ATTORNEY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: HARIRI et al. Confirmation No.: To be assigned
Serial No.: 10/511,355 Art Unit: To be assigned
Filed: October 12, 2004 Examiner: To be assigned
For: MODULATION OF STEM AND Attorney Docket No.: 9516-149-999
PROGENITOR CELL
DIFFERENTIATION, ASSAYS, AND
USES THEREOF

**POWER OF ATTORNEY BY ASSIGNEE
AND EXCLUSION OF INVENTOR(S) UNDER 37 C.F.R. 3.71
WITH STATEMENT UNDER 37 C.F.R. 3.73(b)**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The undersigned assignee of the entire interest in the above-identified subject application hereby appoints Practitioners at Customer Number 20583 all of Jones Day, whose address is 222 East 41st Street, New York, New York 10017, as its attorneys to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith, said appointment to be to the exclusion of the inventors and their attorney(s) in accordance with the provisions of 37 C.F.R. 3.71.

Please direct all correspondence for this application to Customer no. 20583.

Statement Under 37 C.F.R. 3.73(b)

Anthrogenesis Corporation states that it is:

- ☒ the assignee, with Celgene Corporation and Signal Pharmaceuticals, LLC, of the entire right, title, and interest; or
☐ an assignee of less than the entire right, title and interest.
The extent (by, percentage) of its ownership interest is %

in the patent application/patent identified above by virtue of either:

- ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office on _____ at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

- ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office on _____ at Reel _____, Frame _____, or for which a copy thereof is attached.
2. From: _____ To: _____


The document was recorded in the United States Patent and Trademark Office on
at Reel , Frame , or for which a copy thereof is attached.

3. From: To:
The document was recorded in the United States Patent and Trademark Office on
at Reel , Frame , or for which a copy thereof is attached.

- ☐ Additional documents in the chain of title are listed on a supplemental sheet.
- ☐ Copies of assignments or other documents in the chain of title are attached.
[Note: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

ASSIGNEE: Anthrogenesis Corporation

Date: 3/18/05 Signature: 

Typed Name: Robert J. Hariri, M.D., Ph.D

Position/Title: President

ASSIGNMENT

WHEREAS, I, **ROBERT J. HARIRI**, a citizen of The United States, residing at 5 Heritage Road, Florham Park, New Jersey, 07932, ASSIGNOR, am coinventor with David I. Stirling, Laure A. Moutouh-de Parseval and Kyle W.H. Chan of the invention in **MODULATION OF STEM AND PROGENITOR CELL DIFFERENTIATION, ASSAYS, AND USES THEREOF** for which we have executed an application for patent

- ☐ which is executed on ☐ even date herewith or ☐
☒ which is identified by attorney docket no. 9516-149-999
☒ which was filed on October 12, 2004 as U.S. Application No. 10/511,355, U.S. National Stage of International Application No. PCT/US03/11190, filed April 11, 2003

and WHEREAS, **ANTHROGENESIS CORPORATION**, a corporation organized and existing under the laws of the state of New Jersey, and having an office for the transaction of business at 45 Horsehill Rd., Cedar Knolls, New Jersey 07927, ASSIGNEE, is desirous of obtaining my entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, I, the said ASSIGNOR, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, my entire right, title and interest in, to and under the said invention, and the said International application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;


AND I HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant and agree that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal the day and year set opposite my signatures.

Date 3/18, 2005

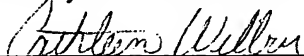

ROBERT J. HARIRI

L.S.

State of NJ)
) SS.:
 County of Morris)

On 3/18, 2005, before me, Cathleen Wilbur, Notary Public, personally appeared **ROBERT J. HARIRI**, personally known to me on the basis of satisfactory evidence to be the person(s) whose name(s) is subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal



CATHLEEN WILBUR
NOTARY PUBLIC OF NEW JERSEY
 Commission Expires 1/15/2007



Express Mail No.: **ED 628 943 828 US**
POWER OF ATTORNEY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: HARIRI et al. Confirmation No.: To be assigned
Serial No.: 10/511,355 Art Unit: To be assigned
Filed: October 12, 2004 Examiner: To be assigned
For: MODULATION OF STEM AND PROGENITOR CELL
DIFFERENTIATION, ASSAYS, AND
USES THEREOF Attorney Docket No.: 9516-149-999

**POWER OF ATTORNEY BY ASSIGNEE
AND EXCLUSION OF INVENTOR(S) UNDER 37 C.F.R. 3.71
WITH STATEMENT UNDER 37 C.F.R. 3.73(b)**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The undersigned assignee of the entire interest in the above-identified subject application hereby appoints Practitioners at Customer Number 20583 all of Jones Day, whose address is 222 East 41st Street, New York, New York 10017, as its attorneys to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith, said appointment to be to the exclusion of the inventors and their attorney(s) in accordance with the provisions of 37 C.F.R. 3.71.

Please direct all correspondence for this application to Customer no. 20583.

Statement Under 37 C.F.R. 3.73(b)

Celgene Corporation states that it is:

- ☒ the assignee, with Anthrogenesis Corporation and Signal Pharmaceuticals, LLC, of the entire right, title, and interest; or
☐ an assignee of less than the entire right, title and interest.
The extent (by, percentage) of its ownership interest is %

in the patent application/patent identified above by virtue of either:

- ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office on _____ at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

- ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

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The document was recorded in the United States Patent and Trademark Office on _____ at Reel _____, Frame _____, or for which a copy thereof is attached.
2. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office on
at Reel , Frame , or for which a copy thereof is attached.

3. From: To:
The document was recorded in the United States Patent and Trademark Office on
at Reel , Frame , or for which a copy thereof is attached.

- ☐ Additional documents in the chain of title are listed on a supplemental sheet.
- ☐ Copies of assignments or other documents in the chain of title are attached.
[Note: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]


The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

ASSIGNEE: **Celgene Corporation**

Date:

3/11/05

Signature:



Typed Name:

Sol J. Barer

Position/Title:

President and Chief Operating
Officer

ASSIGNMENT

WHEREAS, I, **DAVID I. STIRLING**, a citizen of the United Kingdom, residing at 3281 Round Hill Road, Warren, New Jersey, 08876, ASSIGNOR, am coinventor with Robert J. Hariri, Kyle W.H. Chan and Laure Moutouh-de Parseval of the invention in **MODULATION OF STEM AND PROGENITOR CELL DIFFERENTIATION, ASSAYS, AND USES THEREOF**, for which we have executed an application for patent

- ☐ which is executed on ☐ even date herewith or ☐
- ☒ which is identified by attorney docket no. 9516-149-999
- ☒ which was filed on October 12, 2004 as U.S. Application No. 10/511,355, U.S. National Stage of International Application No. PCT/US03/11190, filed April 11, 2003

and WHEREAS, **CELGENE CORPORATION**, a Delaware corporation having a principal place of business at 86 Morris Avenue, Summit, New Jersey 07901 ASSIGNEE is desirous of obtaining my entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, I, the said ASSIGNOR, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, my entire right, title and interest in, to and under the said invention, and the said International application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

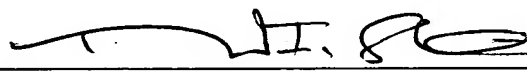
AND I HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant and agree that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

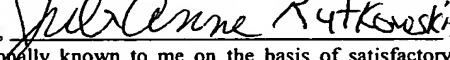
IN TESTIMONY WHEREOF, I hereunto set my hands and seal the day and year set opposite my signature.

Date 11th MARCH, 2005

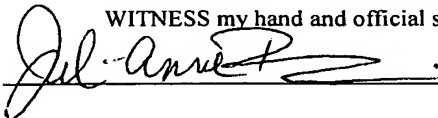

 DAVID I. STIRLING L.S.

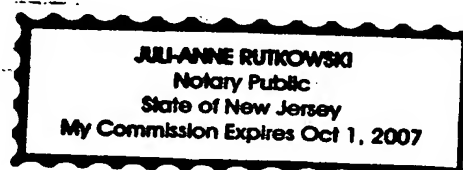
State of New Jersey,)
) SS.:

County of Union)

On March 11, 2005, before me,  Notary Public, personally appeared DAVID I. STIRLING, personally known to me on the basis of satisfactory evidence to be the person(s) whose name(s) is subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal







Express Mail No.: **ED 628 943 828 US**
POWER OF ATTORNEY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:	HARIRI et al.	Confirmation No.:	To be assigned
Serial No.:	10/511,355	Art Unit:	To be assigned
Filed:	October 12, 2004	Examiner:	To be assigned
For:	MODULATION OF STEM AND PROGENITOR CELL DIFFERENTIATION, ASSAYS, AND USES THEREOF	Attorney Docket No.:	9516-149-999

**POWER OF ATTORNEY BY ASSIGNEE
AND EXCLUSION OF INVENTOR(S) UNDER 37 C.F.R. 3.71
WITH STATEMENT UNDER 37 C.F.R. 3.73(b)**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The undersigned assignee of the entire interest in the above-identified subject application hereby appoints Practitioners at Customer Number 20583 all of Jones Day, whose address is 222 East 41st Street, New York, New York 10017, as its attorneys to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith, said appointment to be to the exclusion of the inventors and their attorney(s) in accordance with the provisions of 37 C.F.R. 3.71.

Please direct all correspondence for this application to Customer no. 20583.

Statement Under 37 C.F.R. 3.73(b)

Signal Pharmaceuticals, LLC states that it is:

- ☒ the assignee, with Anthrogenesis Corporation and Celgene Corporation, of
the entire right, title, and interest; or
- ☐ an assignee of less than the entire right, title and interest.
The extent (by, percentage) of its ownership interest is %

in the patent application/patent identified above by virtue of either:

- ☒ An assignment from the inventor(s) of the patent application/patent identified above.
The assignment was recorded in the United States Patent and Trademark Office on
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OR

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The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

ASSIGNEE: Signal Pharmaceuticals, LLC

Date:

3/30/05

Signature:

Alan J. Lewis

Typed Name:

Alan J. Lewis

Position/Title:

President

ASSIGNMENT

WHEREAS, WE, LAURE A. MOUTOUH-DE PARSEVAL, a citizen of France, residing at 9608 Caminito Del Feliz, San Diego, California, 92121, and KYLE W.H. CHAN, a citizen of the United States, residing at 3922 Montefrio Court, San Diego, California, 92130, ASSIGNORS, are coinventors with Robert J. Hariri and David I. Stirling of the invention in **MODULATION OF STEM AND PROGENITOR CELL DIFFERENTIATION, ASSAYS, AND USES THEREOF**, for which we have executed an application for patent

- ☐ which is executed on ☐ even date herewith or ☐
☒ which is identified by attorney docket no. 9516-149-999
☒ which was filed on October 12, 2004 as U.S. Application No. 10/511,355, U.S. National Stage of International Application No. PCT/US03/11190, filed April 11, 2003

and WHEREAS, **SIGNAL PHARMACEUTICALS, LLC** a corporation of the State of California, having a principal place of business at 4550 Towne Centre Court, San Diego, California 92121, ASSIGNEE, is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said International application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

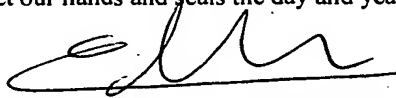
AND WE HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

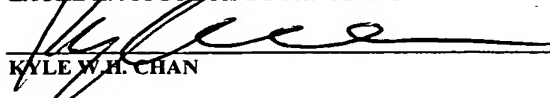
IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date 3/30, 2005


LAURE A. MOUTOUH-DE PARSEVAL

L.S.

Date 3/30, 2005


KYLE W.H. CHAN

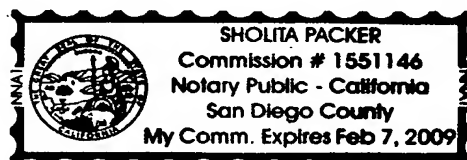
L.S.

State of CALIFORNIA)
County of SAN DIEGO) SS.:

On MARCH 30, 2005, before me, SHOLITA PACKER Notary Public, personally appeared LAURE A. MOUTOUH-DE PARSEVAL personally known to me on the basis of satisfactory evidence to be the person(s) whose name(s) is subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal





State of CALIFORNIA)
County of SAN DIEGO) SS.:

On MARCH 30, 2005, before me, SHOLITA PACKER Notary Public, personally appeared KYLE W.H. CHAN, personally known to me on the basis of satisfactory evidence to be the person(s) whose name(s) is subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

Sholita Packer

